

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

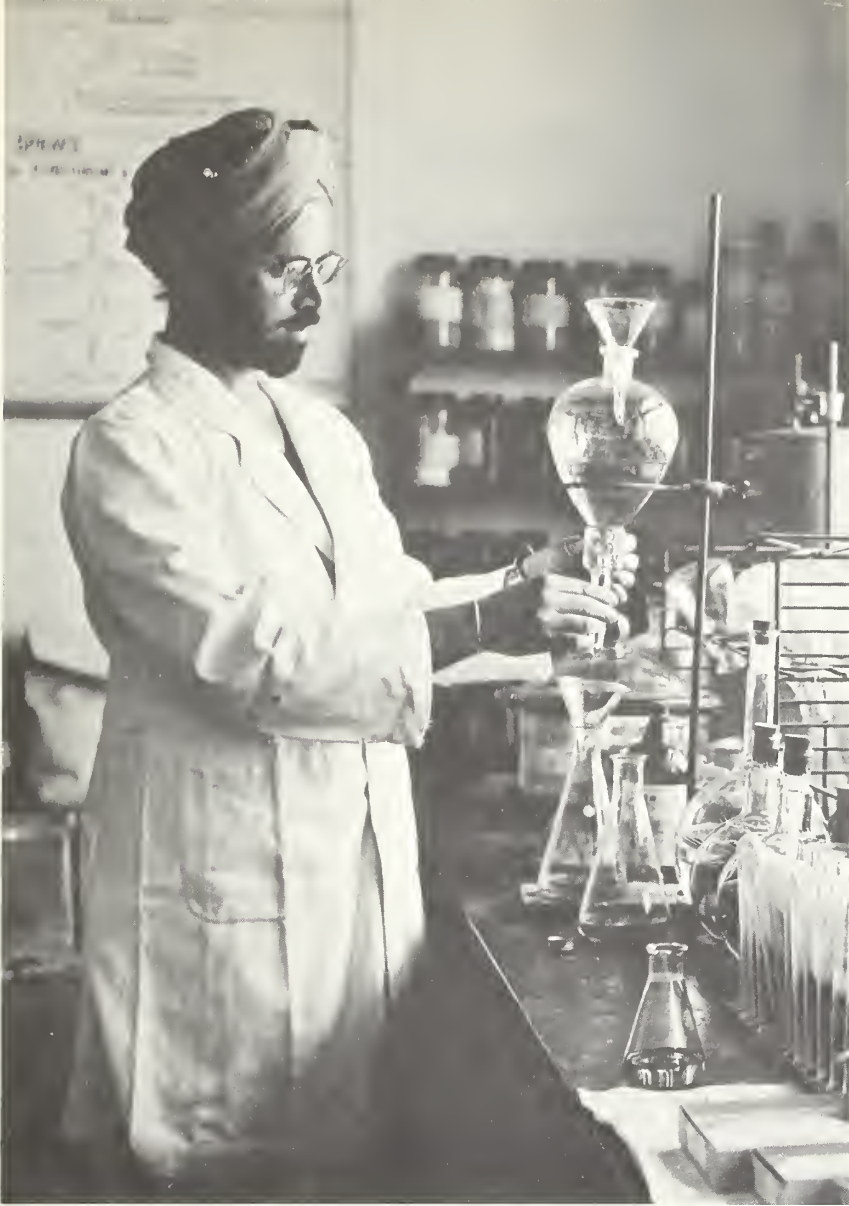


DECEMBER 26, 1966

P.L. 480 RUPEES SUPPORT  
FARM RESEARCH IN INDIA

MAINLAND CHINA MAY  
TRY NEW LEAP FORWARD

FOREIGN AGRICULTURE  
INDEX FOR 1966



# FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

A WEEKLY MAGAZINE OF THE UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREIGN AGRICULTURAL SERVICE

# FOREIGN AGRICULTURE

Including FOREIGN CROPS AND MARKETS

DECEMBER 26, 1966

VOLUME IV • NUMBER 52



Indian scientist working on the Malaria Eradication Program—one of the biggest recipients of grants from U.S. P.L. 480 funds. See opposite page for article on P.L. 480 research in India.

## Contents

- 3 P.L. 480 Rupees Support Agricultural Research in India
- 5 Mainland China May Attempt Another Great Leap Forward
- 6 Pakistan Needs Food Imports Despite Agricultural Progress
- 7 Settlement Schemes Spell Progress, Problems for Kenya
- 9 Food Promotions Slated for 15 Countries Next Year
- 11 The Foreign Market for U.S. Dairy Products
- 12-13 World Crops and Markets (Commodity index on page 13)
- 14 Index to *Foreign Agriculture*, 1966

Orville L. Freeman, Secretary of Agriculture

Dorothy H. Jacobson, Assistant Secretary for International Affairs

Raymond A. Ioanes, Administrator, Foreign Agricultural Service

Editor: Alice Fray Nelson

Associate Editors: Ruth A. Oviatt, Janet F. Beal, Elma E. Van Horn

### Advisory Board:

W. A. Minor, Chairman; Donald K. Childers, Horace J. Davis, John H. Dean, David L. Hume, Robert O. Link, Kenneth W. Olson, Donald M. Rubel, Quentin M. West.

This magazine is published as a public service, and its contents may be reprinted freely. Use of commercial and trade names in the magazine does not imply approval or constitute endorsement by the Department of Agriculture or the Foreign Agricultural Service.

Foreign Agriculture is published weekly by the Foreign Agricultural Service, United States Department of Agriculture, Washington, D. C. 20250. Use of funds for printing this publication has been approved by the Director of the Bureau of the Budget (December 22, 1962). Yearly subscription rate is \$7.00, domestic, \$9.25 foreign; single copies are 20 cents. Orders should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C. 20401.



# P.L. 480 Rupees Support Agricultural Research in India

*Renowned scientists from India and the United States are combining their knowledge and skills in this largest of our P.L. 480 research programs.*

By ALVIN D. AYERS

*Former Director, Far Eastern Regional Research Office  
American Embassy, New Delhi*

Rupees earned by the United States from farm-product exports to India are bringing improvement through research to the agricultures of both nations. For India, this domestically based research makes attaining a critical food-production goal more likely; for the United States, it promises such innovations as processes that protect cotton goods against weathering and more effective measures to combat plant pests and diseases.

## **Largest of our overseas programs**

Mounting food needs have made India the largest importer of U.S. farm commodities under Title I of Public Law 480, which calls for payment in the recipient country's currencies. The resultant credits in nonconvertible rupees go in part to finance agricultural research in India—site of the largest of all P.L. 480 research programs.

As of July 1, 1966, P.L. 480 rupees were financing 186 agricultural research projects in more than 52 research institutions of 35 different Indian cities. These projects, administered by USDA's Agricultural Research Service, fall into the following categories: Agricultural economics, 3 projects; agricultural engineering, 1; animal diseases and parasites, 1; animal husbandry, 8; crops research, 58; entomology, 26; forestry, 17; human nutrition, 8; market quality, 7; soil and water conservation, 5; and utilization of agricultural crops, 52.

Indian aspects of the program are coordinated through the Ministry of Food and Agriculture's review and evaluation committee, which is chaired by the Indian Secretary of Agriculture and includes top officials of other agencies.

Other U.S. organizations, such as the National Institute of Health, have similar but less extensive P.L. 480-supported research programs. The Rockefeller Foundation, the Ford Foundation, and the U.S. Agency for International Development are also helping improve Indian agriculture.

These far-reaching programs, made possible by an abundance of funds, reflect the many qualified researchers and facilities in India and the government's interest in increasing its research activities. P.L. 480 grants are made only to colleges, universities, government laboratories, and industrially supported organizations that have adequate facilities and qualified supervisory personnel able to carry out specialized projects.

## **Improving grain-sorghum varieties**

Many of the projects are concerned with the improvement of agricultural crops, such as the search for better-adapted, high-yielding varieties of grain sorghums. These are important to India both as food for humans and fodder for animals. In India, sorghums are grown on over 40 million acres under a variety of soil and climatic conditions.

The Indian Government, in cooperation with the Rockefeller Foundation, has assembled over 12,000 samples of grain sorghum varieties and strains from various countries for a systematic study of the germ plasm. This is the world's largest collection of grain sorghums.

The materials are being classified on such factors as growth habits, seed characteristics, resistance to insects and diseases, damage by birds, response to agronomic practices, photoperiodic responses, fodder value, and yield. When properly classified and characterized, the collection will serve as a source of germ plasm for breeders attempt-

*U.S. Secretary of Agriculture Orville L. Freeman presents check for new research project to Dr. M. S. Swaminathan, Director Indian Agricultural Research Institute.*





ing to alter the characteristics of grain sorghums to meet specific conditions.

Several high-yield varieties of these grains have already been developed in India and released to farmers, and some of the collected materials are being used in breeding programs in the United States and Africa. U.S. P.L. 480 funds are supporting studies on the classification and characterization of this collection and an associated collection of pennistetums (millets).

#### Improved cane varieties, cotton processes

Of particular interest to sugar-producing areas of both India and the United States is the development of sugarcane varieties with greater resistance to insects and diseases. Crossing studies, easier for the Indian breeder because the cane flowers better in India than in the United States, are being carried out at the renowned Sugarcane Breeding Institute at Coimbatore. These studies are backed by P.L. 480 financial and technical support and have spurred collaboration between Indian and USDA researchers. Over 100 selected U.S. clones have been airshipped to Coimbatore, and numerous crosses have been made between U.S. and Indian cane; the resultant material is now under study in both countries.

Cotton processing technology is being studied by recognized Indian scientists at several universities and industry research associations. At Bombay University, investigations into the effect of light on cotton are providing information on the photochemical reactions in relationship to radiation bands, humidity, and dyes. These data will be helpful in planning better processes for protecting cotton

*Clockwise from below: Making chapati, Indian staple that may be enriched as a result of grain sorghum research; wasp, a parasite of the sugarcane stem borer, could be used for biological pest control; workers seek insects attacking water hyacinth.*



products against weathering. Such damage is prevalent under conditions of high light intensity and high humidity—conditions that are common in many sections of both India and the United States.

#### Control of insects, plant diseases

Insects and plant diseases cause heavy losses of agricultural products in all countries. Chemical control is sometimes impractical because of physical problems, costs, or lack of materials; and it also can be hazardous. Hence, biological control methods are needed as supplemental or alternate procedures.

Because many crops, forest trees, and weeds growing in India are similar to those found in the United States, biological control methods found to be useful in India may also be useful in the United States. Under study are parasites and predators of gypsy moth, corn earworm, rice borer, sugarcane borer, balsam woolly aphid, and insects and diseases that may control noxious weeds. Several trial shipments of some of the promising agents have already been sent for testing under U.S. conditions.

The Khapra beetle is native to the Indian subcontinent, but there have been several outbreaks in stored grain in the United States. Eradication is expensive, and the potential hazard of the Khapra beetle's re-entry has prompted Indian research into ways of eliminating the beetle.

#### Scientist-to-scientist contact and training

Each project is sponsored by a research group in the USDA and by one leading USDA scientist in particular, called a "sponsoring scientist." This makes available a wealth of scientific competence, both Indian and U.S., to bear on the problems under study. Besides the scientific correspondence between the Indian investigators and USDA sponsoring scientists, the United States is sending to India a few selected specialists to review and discuss the projects.

Also, on each of the planned programs, two or three young Indian scientists may work under a recognized senior scientist. As a result, several hundred younger scientists are receiving advanced training, experience, and—in some cases—advanced degrees.



# Mainland China May Attempt Another Great Leap Forward

JOHN R. WENMOHS

*U.S. Agricultural Attaché, Hong Kong*

Mainland China may again be on the verge of another Great Leap Forward. From an economic point of view some rather odd things seem to be taking place. Or to use the Chinese Communist expression "politics are being put in command," which is another way of saying that the political climate is more important in determining production than the current weather.

When the Chinese Communists took over Mainland China in 1949 they had the support of most of the people. Halting of inflation and the land reform won additional support although some 2 or 3 million landlords and other "capitalist elements" were killed in the process.

The peasants were organized into mutual aid teams of 20 to 40 families. Although the peasants soon lost their newly acquired lands (except for private plots) to higher-level cooperatives or collectives (consisting of several mutual aid teams), the Chinese Communists were able to generate an enthusiasm and momentum for the development of China. This momentum began to wear out in 1956 largely because the pace toward socialism was faster than the peasants were willing to accept.

The authorities relaxed the pressure in 1957, with a resultant increase in production, but in late 1957 and early 1958 new pressures were applied to the peasants to achieve communization at once. The form that began to emerge was that of the commune, with 10,000 to 12,000 acres of cultivated land and 20,000 to 30,000 people. The commune was not only to engage in agricultural production but also to manufacture many of its own needs such as tools, building materials, and even iron in the famous backyard furnaces.

## Jack-of-all-trades concept

It has now become fairly clear that Mao Tse Tung's conception of communism is one where everyone is a jack-of-all-trades. The peasant in his spare time is also to be a carpenter, a machinist, and a soldier. The industrial worker is to engage in farm work and train as a soldier periodically. Soldiers will work on the farms and in the factories. Teachers and others will become adept as farmers, soldiers, and industrial workers. Everyone will work for the good of the collective and the state, and private property as such will be eliminated.

Mao apparently further believes that people will only achieve the correct mentality through severe struggle and hard work. This is also tied in with the belief that China's main resource is people, and that sheer numbers of people will have to substitute for a shortage of machines and tools (including war equipment) in making China a first-rate power.

## Why the 1958 leap failed

In brief, these are the beliefs that Mao tried to put into practice in 1958. Many reasons have been given for the disaster that followed. The Chinese Communist reason is that they had 3 years of bad weather. The weather was not favorable but not as unfavorable as the Chinese Com-

munists would have us believe. Some of the contributing factors were:

First, the peasants failed to harvest (bring into the barn) the very good 1958 crop. Much of it spoiled in the fields because the peasants were put to work on backyard furnaces and other nonfarm work.

Second, the extent of the 1958 harvest was grossly over-reported—375 million tons of grain later reduced to 250 million tons. This had two major ill effects on the economy: The acreage devoted to grain was reduced by 25 million acres; and the Chinese undertook investments and other commitments far in excess of available resources.

And third, the persons with the necessary managerial ability and technical knowledge to run the huge commune farm enterprises had not been developed. Peasants who had never managed more than a few acres were suddenly put in charge of 10,000 or more acres. They couldn't cope with this situation.

## Private plots returned

With a short crop in 1959, which was again grossly over-estimated, the situation became desperate. In the meantime, hogs, poultry, and draft animals had died like flies on the way to and in the collective pens and barns. It took the second poor crop in 1960 to make Mao realize that his system was not working.

In 1961 private plots were restored, and peasants were encouraged to raise pigs and poultry. Also, the free market was re-established so that the peasants could sell their produce. Equally important, the production team or small village of 20 to 40 families (former mutual aid teams) was again made the basic production and accounting unit.

The 1964 harvest was substantial but it did not equal that of 1957. The following year the harvest was slightly reduced because of adverse weather, and we believe that the 1966 harvest is below the 1965 level.

This year a drought in north China adversely affected the wheat crop, and in south China the early rice crop was damaged by excessive rains and floods. The late rice harvest has probably been slightly reduced by a lack of rain. Miscellaneous grain acreage is believed to be up, resulting in an increased production. Cotton and soybeans are believed to be about the same as in 1965, but potato production has probably decreased.

## Political campaign intensified

We tried to exclude the effects of the "great cultural revolution" in making these estimates. The current political indoctrination campaign started in mid-1964 and has become increasingly intense. The real heat was turned on in about January of this year, and since then many propaganda chiefs have lost their jobs, including the national chief. The Mayor of Peking, who was about No. 8 in the hierarchy, has been fired. A few provincial governors and several vice governors have been sacked as well as party secretaries. There is a new chief of staff for the armed forces. Also, many university presidents and professors are out of a job.

The Red Guards is the one really new and interesting

development. Most of our political analysts believe that the army, the party, and the government organizations were not reliable enough to carry out the purge, and therefore a new organization was needed. Another speculation is that in addition to the first reason, Mao believed that this was a good opportunity to give the youngsters some training in class struggle.

We are convinced that Mao is trying to revitalize the commune system. Whether he will succeed is still in doubt. There are apparently many persons, including those at the top, who are opposing Mao. But if Mao wins we feel that chances are good that the Great Leap Forward disaster will be repeated.

#### **GLF would decrease output**

It is almost certain that a new Great Leap Forward would mean a decrease in agricultural production, with the consequent requirement to increase the import of grain. It could also mean a decrease in earnings of foreign ex-

change. As a matter of fact, remittances by overseas Chinese to relatives in China have already dropped. It is conceivable that circumstances may arise which would cause Mainland China to be interested in U.S. grain.

The issue of agricultural policy, we believe, has not yet been decided. Indications of whether the Mao group has won will probably take the form of the peasants losing their private plots, the transfer of privately owned pigs and poultry to collective ownership, and other similar measures reducing the peasants' private property. There have been a few unconfirmed reports that this has already taken place.

At this point, we believe that the top authorities in Peking have not yet made a definite decision. A movement whereby the peasants "voluntarily" give up their private plots, hogs, and poultry may be attempted by the Mao group before there is a consensus in Peking. However, until the opposition in Peking and in the countryside is greatly reduced we feel that such an attempt would fail.

## **Pakistan Needs Food Imports Despite Agricultural Progress**

Pakistan is the world's fifth most populous country (119 million), exceeded only by Mainland China, India, Russia, and the United States. Agriculture is the largest segment of the economy, contributing 47 percent to the Gross National Product but earning most of Pakistan's foreign exchange, as 76 percent of total exports are raw and processed agricultural products.

The growth rate of Pakistan's agriculture during the second 5-year plan (1960-65) was around 3.5 percent per annum (the large crop subsector had a growth rate of 4.3 percent). Livestock production remained static. While this is a significant improvement in production, there was no significant improvement in per capita output. Sizable imports of foodgrains and vegetable oil are needed to maintain per capita daily calorie intake to about 2,120 per day, mostly from cereals.

The target for the third 5-year plan (1965-70) is a growth rate of 5 percent and self-sufficiency in food production. While this is a highly desirable goal for Pakistan, its achievement on a sustained basis may prove to be difficult. Nevertheless, there exist potentials for increasing agricultural production. These potentials, however, have heavy competition from the estimated annual population growth rate of about 3.0 percent.

#### **Anticipated food requirements**

In the recent past Pakistan has absorbed yearly about \$120-140 million worth of U.S. agricultural commodities. Import needs are anticipated at these levels through fiscal 1970, as gains in production will be absorbed by population increases. The current year's P.L. 480 commitments amount to \$68 million.

The outlook for commercial sales of U.S. agricultural commodities to Pakistan is limited in the foreseeable future. In fiscal 1966, Pakistan purchased 77,000 tons of U.S. wheat under CCC dollar credit. Also, some tallow was purchased for dollars. These were the first sizable dollar purchases from the United States in recent years.

So far in fiscal 1967 Pakistan has purchased 100,000 tons of wheat from the United States and 329,000 tons

from Australia from its own foreign exchange resources. Over and above the P.L. 480 imports, additional supplies of between 250,000-350,000 tons are needed to meet pre-harvest minimum consumption needs. Pakistan's most recent purchase of 250,000 tons of Australian wheat was made in preference to U.S. wheat because of lower prices, delivery time, and terms of payment.

There exists a demand for nonfat dry milk and tallow. There is a possibility of some soybean purchases—if foreign investment can be found for a processing mill—and also purchases of soybean meal for poultry feed.

Pakistan will import substantial quantities of fertilizers, insecticides, pesticides, and farm equipment over the next few years. With U.S. AID financing and Pakistani matching funds required, the United States should obtain a large share of these purchases.

#### **Increases planned for some export crops**

Pakistan's leading agricultural export is jute, averaging over \$125 million a year. The United States is an important customer for jute and is also a buyer of carpet wool.

Cotton is Pakistan's second largest farm export. Cotton exports have averaged about 500,000 bales a year (one-third Desi and two-thirds American upland types). Exports of Desi and upland cotton going to China and East European countries are not directly competitive with U.S. cotton; however, Pakistani and U.S. growths do compete for markets in Japan, Hong Kong, and Western Europe. Currently, Pakistan is experiencing some difficulty in these competitive markets because of higher prices and higher waste contents in its cotton. Yet in spite of these difficulties, Pakistan's plans call for a substantial increase in production (3.5 million bales in 1970) and in cotton exports.

Rice exports have varied between 100,000-140,000 tons a year. It is a high-priced commodity and has a specialty market in Persian Gulf and African countries. The USSR is a new major buyer. It is expected that in coming years Pakistan's rice production and export availability will increase.

—HARRY C. BRYAN

*Assistant U.S. Agricultural Attaché, Karachi*





A sheep farm in the highlands of western Kenya.

# Settlement Schemes Spell Progress, Problems for Kenya

By HOWARD A. AKERS  
*U.S. Agricultural Attaché, Nairobi*

The transfer of land from European to African farmers continues to rank foremost among Kenya's agricultural opportunities and problems. It is also serving as a model for Africanization of other areas of the economy.

Begun in 1961, this transfer of land, through settlement schemes, represents the biggest and most ambitious program of its kind in all Africa. Through the schemes, some 1.2 million acres have thus far changed hands, giving Africans a much larger share of Kenya's commercial production and stabilizing land prices. Another 400,000 acres will be transferred over the next 4 years at a rate of 100,000 acres yearly. However, more emphasis now must be placed on developing the current operations into productive enterprises and bringing total output in settled areas up to normal.

## Types of schemes

The program itself is broken down into two major groups. The high-density schemes—collectively called the million-acre settlement scheme—form the backbone. Financed mainly through loans from the British Government, these are intended for formerly landless or unemployed persons. Individual holdings on them range in size from 7 acres to 20; and incomes—after expenses—supposedly will be between \$70 and \$196. Low-density schemes—the second major type—are partly financed by the World Bank. On these, experienced farmers may obtain up to 50 acres of land and an annual income of around \$280.

In addition, there are a few schemes that involve large-scale or cooperatively run farms.

All of this land is coming from the approximately 7.5 million acres that once made up the European-owned

areas in the Central Highlands. In 1962, prior to the start of large-scale land transfers, these farms produced 78 percent of the gross value of marketed agricultural output. They contributed an even higher proportion of Kenya's agricultural exports and accounted for about 42 percent of the total reported employment.

Many of the large plantations and ranches here have changed hands. However, far the greatest shift has taken place in the mixed farmland, where well over half of the farms have moved from Europeans to Africans (including those sold on a willing seller-willing buyer basis). This region covers about 3.4 million acres of the most fertile land in the former European areas and once accounted for about 25 percent of all farm products marketed.

Obviously, when more than 30,000 African farmers are settled on land once farmed by 930 Europeans there will be a big change in the production patterns, the amount of subsistence crops, the needs of the farmers, and the products delivered by the farms to market.

## Results as yet mixed

There was during the early days of settlement a considerable drop in the area's total output to a level well below that of presettlement days; output was especially affected by a crash program which was implemented on the President's instructions in November 1963, when 3,000 farmers had to be settled in 3 weeks on 100,000 acres of land. There are indications, however, that with most of the schemes coming near to maturity, production has increased. Data on some of the early schemes show their output up 25 percent from presettlement days.

The government position, as stated in the Development Plan 1966-70, is as follows:

"Unfortunately, reliable data on total production of African settlers and large-scale farmers who have taken





*Above, corn being chopped for silage on a 2,164-acre African farm at Mitubiri in the Thika district of Kenya. Before settlement, this farm was owned by Europeans.*



*Above, a typical African "shamba" near Nairobi. Lower left, Masai-owned cattle in the Kajiado district; lower right, picking pyrethrum—a major source of income to the African settlers.*



over former European-owned land are not available, so that it is not possible to say accurately what has happened to total production on the 3.4 million acres of mixed farming land. However, there is some evidence that transfer of over a million acres in less than 4 years has brought about a situation where 1964-65 output on this land was substantially less than the 1961-62 level. The government is confident that this decline will be reversed and that, once all the schemes in the million-acre program have achieved maturity, more intensive land use will result in production levels substantially higher than in 1961-62.

"But in the meantime, it is clear that this transitional period in the mixed farming areas is costing the national economy significant amounts of output, foreign exchange, and personal income. The government has therefore decided that the rate of land transfer in the mixed farming areas will be slowed down for a few years in order to permit consolidation of existing schemes and insure steady progress in the mixed farming economy."

#### **Shift among crops**

Within the production total, there have been some striking crop changes.

One of these is the shift toward additional pyrethrum production on land formerly used for wheat or barley. The two grains are more suitable for large-scale farming,

whereas pyrethrum can be grown on small plots. The United States is a major buyer of pyrethrum extract from Kenya and this year shipped wheat under P.L. 480 to meet deficits in Kenya, as well as in Uganda and Tanzania; normally, Kenya supplies most of the wheat needs of these two countries.

Also, livestock products have taken on expanded importance, accounting for about 60 percent of the settlers' budgeted income. According to Settlement-Department statistics, the settlers owned as of March 1966 108,383 head of improved cattle and 80,588 head of wool sheep. In 1965-66 (April-March), they produced some 3.2 million gallons of milk and 645,000 pounds of butterfat.

This emphasis on dairy production is also affecting world markets. The Ministry of Agriculture has asked for offers on dairy stock from the United States and other countries, indicating a demand for 6,000-10,000 head annually if satisfactory business arrangements can be made. Also, the remaining large mixed farms that produce dairy products are searching for basic stock to upgrade their herds and this past September imported 30 head of British dairy stock for that purpose.

Kenya is an exporter of dairy products—butter, some milk, and European-type cheese—and sees no reason to let this market go. Exports of bacon are also being maintained, though at the expense of domestic consumers.



# Food Promotions Slated for 15 Countries Next Year

*The drive to build U.S. farm exports will reach into big cash markets and some just developing.*

A banner year is in prospect for U.S. food promotions abroad as the Foreign Agricultural Service extends its trade fair participation, food exhibits, seminars, and in-store promotions to 15 countries around the globe. The 1967 program will cover most of Western Europe, move into the eastern Mediterranean to Greece and Lebanon, and reach across the Pacific to Japan and the Philippines.

As in 1966, next year's exhibits will be aimed primarily at the foreign trade—importers, quantity food dealers, and institutional users—rather than the general public. Many, including all those at U.S. trade centers, are exclusively for the trade. Trade-only areas and trade lounges will be prominent in U.S. exhibits at international trade fairs, events open to the public as well as to quantity buyers. Although most of the promotions will take place in big dollar markets, five are slated for Greece, Lebanon, and the Philippines, countries developing as cash buyers of U.S. farm goods.

Biggest pitch for the consumer's food dollar will be made through in-store promotions. In England and Scotland, these will be held simultaneously with international trade fairs. Other countries where negotiations for point-of-sale campaigns have been completed or are under way include the Netherlands, Belgium, France, West Germany, Austria, and Japan.

A glimpse of the fairs and exhibits on the 1967 agenda follows. All except Berlin's Green Week are open for participation by U.S.-based firms and commodity groups. Further details are available from the International Trade Fairs Division, Foreign Agricultural Service, USDA, Washington, D.C., 20250.

**Green Week, Berlin, West Germany, Jan. 27-Feb. 10.**

Green Week annually attracts over 450,000 people to displays of foods from about 15 nations. Previous exhibits have helped sell a wide variety of U.S. foods in the Berlin area. At the 1966 fair, fruit juices, seasonings, peanut butter, and canned fruits were big movers. U.S. foods are exhibited

by their German importers, and sales are permitted from the floor. USDA cooperates with the U.S. Information Agency in sponsoring the U.S. display. **Food Products Exhibit, U.S. Trade Center, Milan, Italy, Jan. 18-24.**

On display will be brand-name processed foods, including gourmet and specialty items, in both consumer- and catering-sized packages. Over 1,000 Italian tradesmen attended this year's exhibit, where pecans, specialty cheeses, and raisins were popular.

**Frozen Food Exhibit, U.S. Trade Center, London, England, Feb. 14-23.**

U.S. packers of frozen staple and specialty items will appeal for a larger share of Britain's \$250 million frozen food business. Sales potential for broccoli, asparagus, and mixed vegetables looks particularly good.

**17th International Agricultural and Livestock Fair, Verona, Italy, Mar. 12-20.**

The Verona fair is Italy's biggest agricultural exhibition, attracting about 800,000 people this year, and has proved a good sales point for U.S. livestock and feeds. The United States has exhibited annually since 1957.

Focus of next year's U.S. exhibit will be on feedgrains and feed ingredients, including tallow and soybeans, which have been moving to Italy in record-breaking amounts. FAS is exploring the possibility of showing some breeding heifers, about 30 veal calves (now finding a good market in Italy) and some feeder and breeding pigs (Italian hog producers are anxious to develop a meatier animal).

**Wheat Products Exhibit, U.S. Trade Center, Tokyo, Japan, Mar. 13-20.**

Aimed primarily at expanding U.S. sales of bulk wheat, this exhibit will spotlight the development of new varieties, processing techniques, and products. The overall program will include lectures, films, demonstrations, and displays of processing machinery and new products—desserts, frozen biscuits, crackers, and wheat-product mixes. Among the lectures, one will point up how the United States has been developing wheat varieties aimed specifically for export markets like

Japan, and another will accent new developments in baking. Only the U.S. wheat and flour trades are eligible to participate.

**Processed Foods Exhibits, U.S. Trade Centers, Frankfurt, West Germany, Apr. 5-14; Stockholm, Sweden, Apr. 19-26.**

The last exhibit of U.S. foods at the Frankfurt Trade Center 2 years ago drew hundreds of West German trade representatives anxious to meet growing consumer demands for convenience foods. Demand is still widening, as evidenced by subsequent U.S. exhibits in Berlin, Munich, and other major cities. Poultry items, particularly turkey and turkey parts, are likely to attract attention here, as should canned and dried fruits, fruit juices, and rice.

U.S. processors exhibiting at Frankfurt can move on to Sweden the following week for USDA's first event at the new Stockholm Trade Center. A market survey last spring showed that economic and social changes in Sweden make this country a potentially good market for U.S. processed foods. Cited as having good sales possibilities were turkey rolls, rice, tomato puree and pulp, peanuts, canned corn, pears, oranges, and fruit cocktail. Potential also exists for beef, beans, almonds, raisins, apples, lemons, canned fruits, and pecans.

**Ideal Home Exhibition, Edinburgh, Scotland, Apr. 19-May 6.**

The format of U.S. participation in this consumer- and trade-oriented fair will be similar to that at Manchester last May, combining exhibits with in-store promotions. U.S. firms and cooperator groups handling all sorts of foods from fruits to processed items may exhibit in both the consumer area, where direct sales are permitted, and the trade-only area.

Simultaneously, U.S. foods will be featured in hundreds of retail stores in the Edinburgh-Glasgow area.

**Eastern Mediterranean Nutrition Seminars and Exhibits, Megara and Salonika, Greece, and Beirut, Lebanon, April.**

Commodity groups representing the U.S. feed, feed ingredient, livestock, and poultry industries will join FAS to present improved livestock and poultry feeding techniques and pro-



mote U.S. breeding stock and feeds. Planned for 3 successive weeks, the programs will feature seminar panels of animal nutrition specialists, exhibits, and distribution of brochures prepared by Cornell University. All will underscore the tie between good stock and balanced feeds, as both countries are striving to better their meat output.

Greece is carrying on an energetic program calling for imports of dairy breeding cattle and other livestock. This, in turn, will multiply the demand for feeds, already high on the country's import list. Lebanon has quadrupled the size of its broiler industry in the past 5 years. Imports of corn for the industry—especially from the United States—are following along.

The U.S. program in Megara will coincide with the city's annual poultry fair. Centering around a U.S.-produced feed mixing plant, it will include a demonstration on proper feeding of broilers. Site of the program in Salonika will be the American Farm School, which has received several large shipments of U.S. cattle on a trial basis. If the trials are successful, the World Bank plans to advance the Greek Government a loan to finance imports of breeding stock on a large scale. Results of a feeding program at the school will be available for observation.

The exhibit and seminar in Lebanon will be held in cooperation with the Lebanese Ministry of Agriculture.

**International Food Packaging Fair (Inprodmas), Moscow, USSR, May 16-29.**

Although this is primarily an exhibit of food processing and packaging equipment, a number of processed foods will be included in the U.S. display. Among the items under consideration are frozen meat and poultry, lard, dried milk, rice, and canned vegetables, fruits, and juices. USDA will cooperate with the Departments of State and Commerce and the U.S. Information Agency in the display.

**First International Food Fair, Dublin, Ireland, Sept. 7-16.**

Sponsored by the Irish Retail Food Dealers Association, this fair will follow the format of the British home shows, with food sales permitted from the floor. The United States will have its usual trade-only area, as well as consumer-oriented exhibits. The fair will provide entree for U.S. food products into Irish retail stores, which already stock considerable quantities of

U.S. raisins, sultanas, canned fruits, apples, and pears.

**22nd International Fair of Dairy Cattle, Cremona, Italy, Sept. 25-Oct. 4.**

The Cremona fair, held in the heart of Italy's dairy region, focuses on the showing and sale of dairy breeding cattle, but is also open to exhibitors of feeds, feed ingredients, and feed equipment. Registered Holsteins have dominated U.S. exhibits in the past few years, and those shown in 1966 sold for almost \$100,000. Italy, anxious to upgrade its dairy industry, is now the United States second largest market for dairy breeding cattle.

**Beirut Fall Show, Beirut, Lebanon, Sept. 25-Oct. 4.**

Format of the USDA display, featuring food products, will be similar to that of the Hong Kong show last September, where some 60 U.S. firms exhibited processed food items. The show will aim primarily at the trade.

Lebanon, one of the most prosperous of the West Asian countries, imports a sizable portion of its food requirements and takes vegetable oils and fats, processed fruits and vegetables, some meat and dairy products, wheat and flour, and corn from the United States.

**Yorkshire Food Fair, Leeds, England, Sept. 20-30.**

This will be the United States first appearance at the Yorkshire fair held annually in England's heavily populated industrial north. In a two-pronged promotion, U.S. foods will be featured both at the fairgrounds and in 300-400 stores. The fair is both consumer and trade oriented, and the list of food products with good sales potential is virtually unlimited. U.S. firms should pay particular attention to items new to the expanding U.K. market for specialty and convenience foods.

**ANUGA (International Exhibition of Fine Foods and Provisions), Cologne, West Germany, Sept. 30-Oct. 8.**

Highlight of the U.S. exhibit at this, one of the world's largest international food fairs, will be a Hall of States where individual States can promote the major food products of their farms and factories. Individual food firms as well as commodity groups may participate in both the consumer and trade-only areas with displays ranging from simple exhibits to demonstration-sampling operations.

Among the quarter of a million people who pack the fairgrounds each

year are importers and quantity food dealers from all over Europe. They come to find new products to stock the region's retail shops and supermarkets, which are getting bigger in size and number every year. As European incomes rise and more women work outside the home, the market for processed foods expands, opening the door for the time-saving, the labor-saving, and the convenient.

**U.S. Trade Center Exhibits, Tokyo, Japan, August; London, England, September or October.**

Products to be featured at these annual fall promotions will be announced early next year. Exhibits will most likely center around a single commodity (poultry was the focus of this year's Tokyo exhibit) or a selected group of processed items (the London show this year included cheese, wine, nuts, and processed poultry).

**U.S. Food Exhibit, Manila, the Philippines, Fall.**

Similar to the spring exhibit in Lebanon, this show will introduce U.S. food products new to the Philippines. At the same time, FAS will repeat its successful 1966 in-store promotion at the Makati Supermart in the Manila area, where frozen turkeys and canned peaches were among the new items introduced. Buyer of \$1.75 million in U.S. foods before the promotion, Makati increased its purchases by \$100,000 for the event.

**National Fair of Food, Wine, and Gastronomy, Dijon, France, Nov. 4-12.**

An annual national fair, Dijon has an international section in alternate years. It attracts both trade and public, and direct sales are permitted.

Some 7 cooperating trade organizations and 80 private firms are expected to join FAS in enhancing the image of American foods and wines in France. Items suggested for display include rice, citrus, raisins, prunes, fresh fruits and vegetables, pulses, peanuts, pecans, honey, processed foods, and table wines. Within the U.S. exhibit area, a trade office will be set up for business discussions and transactions.

**U.S. Catering Show, Vienna, Austria, Nov. 15-20.**

Alpine resort chefs will be among invited guests at this special exhibit for the catering and institutional trade of Central Europe. Site of the show—open to U.S. processors offering caterer-sized packages—will be one of Vienna's leading hotels.

# The FOREIGN MARKET for U.S. DAIRY PRODUCTS

By W. L. PHILLIPSEN

*Dairy and Poultry Products Division, FAS*

For 18 consecutive months, milk production in the United States has failed to keep pace with that of the corresponding months of the previous year. Production in fiscal 1965-66 was 4½ percent below fiscal 1964-65. While this decrease in production has not caused a shortage of milk products for domestic consumption, it has affected the supply of those dairy products normally moving into export channels.

Of the total U.S. milk supply, more than half is used to satisfy the requirements of the domestic fluid milk market. The remainder is further processed into various manufactured milk products. However, our price system tends to assure all requirements for fluid milk and fluid milk products before any milk is available for the production of other manufactured dairy products.

The 4½-percent reduction in total milk production during the past fiscal year had the greatest impact on the production of butter and nonfat dry milk. It resulted in a 20-percent decrease in butter production and a 21-percent decrease in nonfat dry milk production. Prices of these products rose in response to the decreased production. For example, in September 1966 nonfat dry milk prices were 5½ cents per pound above prices a year earlier and the monthly average market price for butter reached the highest point since February 1952.

As U.S. supplies dropped and domestic prices rose, and the programs under which export subsidies were provided for Cheddar cheese, butter, and nonfat dry milk were temporarily terminated, the gap between the export price for these U.S. produced dairy products and world market prices widened. Thus, even though the decline in U.S. milk production was relatively small, prices of major U.S.-source dairy products went so high these products became non-price-competitive in world markets.

## U.S. exports respond to supply-price situation

A comparison between U.S. dairy product exports for 1965 and those for 1964 shows the substantial drop in value of \$52 million.

Based on world export prices, the value of FY 1965-66 exports of dairy products totaled \$174.1 million, a decrease of 23 percent from the \$226.2 million total reached in FY 1964-65. Of the 1965-66 total, \$90.4 million were exported under government programs and \$83.7 million were commercial exports. The comparable figures for 1964-65 were \$98.5 million exported under government programs and \$127.7 million as commercial exports. A sharp drop in commercial exports of butter, owing to increased production in Western Europe and smaller U.S. production, was largely responsible for the decline in the dollar value of dairy exports.

## World trade affected

World trade in dairy products, for the first time since 1962, declined in 1965; the outlook is for another decline in 1966. One reason for the anticipated lower level of trade in 1966 is decreased production and increased prices

in the United States. Another reason is that import demand in Western Europe—the most important commercial market for dairy products—was reduced because of increased production in the European Economic Community.

As reported in the November 14, 1966, issue of *Foreign Agriculture*, the dairy surplus problem has changed hemispheres. Milk production in the major free-world producing countries, except the United States and Canada, continues to increase. The overall effect of this change is that dairy products from various countries are meeting stiffer competition in the traditional markets. This has led to more pressure to develop sales from products other than butter and nonfat dry milk and has increased efforts on the part of the supplying countries to build additional markets in the developing countries.

## New emphasis in market development

The changing price-supply situation in the United States has meant changes in the FAS-dairy industry cooperative program to develop export markets for dairy products.

During the past decade, program emphasis has been primarily on the sales of bulk-type dairy products such as nonfat dry milk and butter, purchased by the government under the price-support program. Now with no CCC inventories of these products to be made available at special export prices, and with world prices for these products generally below U.S. prices, both FAS and the U.S. dairy industry have agreed to a "holding action" on market development activities. This agreement was reached because dairy production is cyclical, and there is no way of knowing how far production will drop before an upturn, or how high production will go at the next cycle peak.

## Attention on special items

Recently submitted marketing plans for dairy products include minimal activities to maintain the "presence" of U.S. dairy products until a clearer picture emerges of the U.S. dairy supply situation. These plans propose activities focusing attention on the market for specialized dairy product items such as infant and dietetic foods, cheese other than Cheddar, cheese foods, cheese spreads, malted milk compounds, instant nonfat milk, ice cream mixes, and sterile concentrates. These products have not been directly involved in price support operations. Advanced technology in the production and packaging of specialty items has enabled the United States to continue to offer these products in export markets at competitive prices.

Export sales of these specialty items entering the world market on a commercial basis reached \$16 million during the last calendar year. This was 12 percent of the \$132 million in commercial dairy product export sales for the year and provides strong evidence that the United States is competitive with these items in the world market.

There is also strong evidence that unrealized sales potential exists for specialized dairy products. For example, sales of these products in Chile grew from \$87,000 in 1962 to \$224,000 in 1965. Capitalizing on the potential market for specialized dairy products is a major goal of the 1967 market development program backed by the Foreign Agricultural Service and the U.S. dairy industry.



## Northbound Suez Canal Shipments

Northbound movements of oil-bearing materials through the Suez Canal in October were down somewhat from those of the comparable month in 1965. The decline chiefly reflected reduced movements of copra. Shipments of soybeans were above the comparable period in 1965.

Aggregate shipments of vegetable oils in October at 66,406 metric tons were above both those in September (46,141 tons) and the 55,613 tons in October 1965. The increase chiefly reflected larger movements of palm and cottonseed oils.

October shipments of vegetable cakes and meals through the Canal were 117,868 tons compared with 121,113 tons in same month of last year. Sixty percent of the total was peanut and cottonseed cakes and meals.

NORTHBOUND SHIPMENTS OF OIL-BEARING MATERIALS THROUGH THE SUEZ CANAL

|                       | October     |             | October-September |             |
|-----------------------|-------------|-------------|-------------------|-------------|
|                       | 1965        | 1966        | 1964-65           | 1965-66     |
|                       | Metric tons | Metric tons | Metric tons       | Metric tons |
| Soybeans <sup>1</sup> | —           | 2,348       | 200,532           | 127,564     |
| Copra                 | 105,399     | 74,283      | 748,839           | 897,967     |
| Peanuts               | 5,031       | 17,457      | 178,130           | 157,250     |
| Cottonseed            | 5,092       | 4,162       | 112,558           | 81,652      |
| Flaxseed <sup>2</sup> | —           | —           | 21,025            | 8,807       |
| Castorbeans           | 2,710       | 13,197      | 27,400            | 68,484      |
| Palm kernels          | 2,819       | 3,613       | 30,617            | 35,386      |
| Sesame                | 6,906       | 2,818       | 30,529            | 48,295      |
| Others                | 4,867       | 5,808       | 84,854            | 87,640      |
| Total                 | 132,824     | 123,686     | 1,434,484         | 1,513,045   |

<sup>1</sup> One metric ton of soybeans equals 36.7 bu. <sup>2</sup> Metric ton of flaxseed equals 39.4 bu.

Suez Canal Authority, Cairo, Egypt.

NORTHBOUND SHIPMENTS OF SOYBEANS THROUGH THE SUEZ CANAL

| Month or quarter  | Year beginning October 1 |               |               |               |               |
|-------------------|--------------------------|---------------|---------------|---------------|---------------|
|                   | 1962                     | 1963          | 1964          | 1965          | 1966          |
|                   | 1,000 bushels            | 1,000 bushels | 1,000 bushels | 1,000 bushels | 1,000 bushels |
| October           | 11                       | —             | 1,443         | —             | 86            |
| November          | —                        | 19            | 161           | —             | —             |
| December          | 2                        | —             | —             | 110           | —             |
| October-December  | 13                       | 19            | 1,604         | 110           | —             |
| January-March     | 1,328                    | 1,484         | 2,826         | 1,963         | —             |
| April-June        | 573                      | 706           | 1,376         | 1,026         | —             |
| July-September    | 1,584                    | 4,106         | 1,562         | 1,588         | —             |
| October-September | 3,498                    | 6,315         | 7,368         | 4,687         | —             |

Totals computed from unrounded numbers.  
Suez Canal Authority, Cairo, Egypt.

## Egypt's Cotton Crop Smaller in 1966

Egypt's 1966-67 cotton crop is officially estimated by the Egyptian Government at 2,120,000 bales (480 lb. net), a decrease of 11 percent from the 1965-66 crop of 2,378,000 bales. Production of extra-long staple cotton, at 863,000 bales, is down about 16 percent from a year earlier. Medium-long staple production, at 450,000 bales, is down 27 percent from a year earlier. Exceptionally, production of medium staple, at 776,000 bales, is 11 percent above last season's outturn.

While no official acreage figures for 1966-67 have been released by the Egyptian Government, there are indications that acreage was moderately lower than the harvested area of 1,950,000 acres in 1965-66. The acreage decline and cotton leaf worm damage reportedly were responsible for the reduced crop.

EGYPTIAN COTTON PRODUCTION

| Staple length and variety                         | 1965-66                  | 1966-67                  | Change      |
|---|--------------------------|--------------------------|-------------|
| Extra long staple, over 1 $\frac{3}{8}$ ":        |                          |                          |             |
| Menoufi, Giza 45, and Giza 68                     | 1,000 bales <sup>1</sup> | 1,000 bales <sup>1</sup> | Percent —16 |
| 1,028   |                          | 863                      |             |
| Medium-long staple, 1-9/32" to 1 $\frac{3}{8}$ ": |                          |                          |             |
| Giza 47, Giza 67, and Dendera                     | 614                      | 450                      | —27         |
| Medium staple, 1 $\frac{1}{4}$ " and under:       |                          |                          |             |
| Ashmouni and Giza 66                              | 696                      | 776                      | +11         |
| Subtotal  | 2,338                    | 2,089                    | —11         |
| Scarto (unclassified cotton)                      | 40                       | 31                       | —22         |
| Total   | 2,378                    | 2,120                    | —11         |

<sup>1</sup> Bales of 480 lb. net.

## Dutch Tobacco Imports

Imports of unmanufactured tobacco into the Netherlands during January-June 1966 totaled 49.7 million pounds—a little more than in the first half of 1965. Principal suppliers this year included the United States, 15.0 million pounds; Rhodesia, 7.7; West Germany (mainly re-exports of Indonesian leaf), 6.2; Brazil, 4.4; Belgium, 2.7; Republic of South Africa, 2.3; and Malawi 1.4.

## West Germany's Tobacco Imports

West Germany's imports of unmanufactured tobacco in January-June 1966, at 137.5 million pounds, were up nearly 9 percent from those of the first half of 1965. Larger imports from the United States, Greece, Bulgaria, and Turkey more than offset declines in purchases from Rhodesia, Brazil, and the Philippines.

WEST GERMANY'S TOBACCO IMPORTS

| Origin        | January-June |              |
|---------------|--------------|--------------|
|               | 1965         | 1966         |
|               | 1,000 pounds | 1,000 pounds |
| United States | 38,267       | 41,104       |
| Greece        | 25,650       | 28,681       |
| Bulgaria      | 8,014        | 11,267       |
| Rhodesia      | 11,489       | 9,383        |
| Brazil        | 8,938        | 6,283        |
| Turkey        | 4,241        | 5,777        |
| Japan         | 5,010        | 4,105        |
| China         | 777          | 3,373        |
| Indonesia     | 3,438        | 3,220        |
| Thailand      | 1,206        | 2,879        |
| Colombia      | 2,949        | 2,404        |
| Others        | 16,493       | 18,978       |
| Total         | 126,472      | 137,454      |

## U.K. Butter and Cheese Imports Up

The United Kingdom imported 723 million pounds of butter during the first 9 months of 1966, or 3 percent more than in comparable 1965. A decline of 7 percent in New



Zealand's shipments to 244 million pounds from 262 million pounds was offset by increased shipments from almost all other suppliers. Receipts from Australia were much heavier, amounting to 116 million pounds, compared with 103 million pounds. The following countries each shipped 3 million pounds more in January-September 1966 than in the same months last year: Denmark, 167 million; the Netherlands, 35 million; Poland, 32 million; and Romania, 12 million pounds. Among other countries making larger shipments were Ireland, 37 million compared with 31 million last year; Finland, 32 million (30 million); and Sweden, 10 million (2 million).

Cheese imports were up 3 percent to 231 million pounds. New Zealand provided half of this quantity, even though shipments were considerably smaller than a year ago. Receipts from Australia at 13 million pounds were down 37 percent. Most of the remainder came from West European countries. These included the Netherlands, which supplied 28 million pounds, compared with 18 million pounds last year; Ireland, 20 million (13 million); and Denmark, 15 million (16 million).

## Austria Ships Fewer Dairy Products

Smaller butter production and increased domestic consumption in Austria in the first 6 months of 1966 resulted in a sharp decrease in exports in this same period. Shipments of approximately 4 million pounds were less than half those in the comparable period of 1965. Sales to the United Kingdom, the principal market, dropped to 2 million pounds from 4 million in the earlier year, those to Italy dropped to 1 million from over 2 million.

Cheese exports increased 11 percent to 13 million pounds; 10 million pounds of this went to Italy. The United States accounted for approximately 1 million in both years. Most of the other traditional markets, namely Belgium, West Germany, and the United Kingdom, took slightly larger quantities than a year ago.

Dried whole milk sales were up 14 percent to 23 million pounds. The United Kingdom continued to be the major market, increasing its purchases from 12 million to almost 14 million. Switzerland took 2 million in both years, the USSR and Romania 1 million each in both years.

## Poland's Trade in Dairy Products

Recently released 1965 trade statistics for Poland indicate a decline in exports of all dairy products except casein.

Sales of butter, Poland's most important dairy product export, amounted to 40 million pounds in 1965—8 percent less than in the preceding year. The United Kingdom continued to be the most important market. In 1965 it purchased 39 million pounds, an increase of 13 percent over 1964. Italy took only 78,000 pounds in contrast to 9 million pounds a year earlier. There were no sales to West Germany, which in 1964 purchased 7 million pounds. Small shipments were made to Iran, Syria, and Morocco in both years.

Exports of cheese in 1965, at 2 million pounds, were little more than half of those of 1964. This decline was mostly the result of no sales to West Germany, which the year before had bought 2 million pounds. Trade with the United States rose from 105,000 pounds to 208,000.

Dried milk exports were down 1 million pounds to 4 million and sales to Greece and Italy declined sharply. No shipments were made to Venezuela, but fairly large shipments were made to India, and smaller ones to Syria, Lebanon, and Egypt.

Exports of casein at 8 million pounds were 6 million pounds above those of 1964. Sales to the United States totaled 3 million pounds; last year's sales were less than 1 million. The United Kingdom took approximately 3 million in both years; Finland, 1 million in both years. Most of the remaining shipments were made to Sweden, the Netherlands, and West Germany.

## Australia Streamlines Honey Exporting

The Australian Honey Board has completed plans to appoint two official agents in the United Kingdom and Ireland. Beginning February 1, 1967, all Australian honey exported to the United Kingdom or Ireland will be sent to one or other of the joint agents to meet the demands of honey packers and bottlers. The price paid will become stabilized in line with world parity prices for the grade and quality of the honey sold.

The Board also approved in detail a scheme to be submitted to the Department of Primary Industry and Treasury to operate an advance payment to beekeepers in Australia. Those who choose to sell their honey to the Australian Honey Board could obtain immediate part payment for their product on an assessment of the overseas realization price. Honey sold to the Board will be sent to those appointed state agents who are successful in their tenders to act on the Board's behalf. The Board will then dispose of the honey to either the local or overseas market, according to the most favorable prices obtainable without upsetting normal trade.

---

## WORLD CROPS AND MARKETS INDEX

### Cotton

- 12 Egypt's Cotton Crop Smaller in 1966

### Dairy and Poultry Products

- 12 U.K. Butter and Cheese Imports Up
- 13 Austria Ships Fewer Dairy Products
- 13 Poland's Trade in Dairy Products

### Fats, Oils, and Oilseeds

- 12 Northbound Suez Canal Shipments

### Sugar, Fibers, and Tropical Products

- 13 Australia Streamlines Honey Exporting

### Tobacco

- 12 Dutch Tobacco Imports
- 12 West Germany's Tobacco Imports

# Index to Foreign Agriculture, 1966

|   | Month/day |   | Month/day |
|---|-----------|---|-----------|
| AFRICA: How the EEC helps its African associates .....              | 3/21      | CONTAINERS, VAN: Containerization—J. E. Clayton, P. L. Breakiran    | 5/2       |
| New markets boost U.S. cotton sales—G. A. W. Schilling.....         | 5/2       | Spur exports of frozen turkeys to West Europe.....                  | 11/21     |
| Coffee, cotton, cocoa—"big three"—R. E. Marx .....                  | 11/7      | COOK, A. C.: Mexican strawberry output, exports still soaring ..... | 5/23      |
| Northern Africa seeks key to economic growth—C. Santmyer .....      | 11/7      | Our foreign sales of frozen fruits and vegetables .....             | 5/23      |
| Oilseeds rate high as foreign exchange earners—L. E. Moe .....      | 11/7      | COOPERATIVES: Have opportunities in export market—R. A. Ioanes      | 2/14      |
| Moroccan citrus exports set record .....                            | 11/7      | Denmark's cooperatives after first 100 years—A. M. Rollefson .....  | 10/17     |
| New agricultural geography—S. W. Skinner .....                      | 11/7      | COTTON: Promotion abroad stresses leisure wear .....                | 2/28      |
| East Africa's Rift Valley—C. B. Singleton .....                     | 11/7      | 1966-67 prospects in Europe good as stocks dwindle .....            | 3/7       |
| Botswana and Lesotho join free nations—R. C. Mancure .....          | 11/7      | New markets boost total sales to Africa—G. A. W. Schilling.....     | 5/2       |
| Cashew industry hinges on mechanization—R. C. Torrens .....         | 11/7      | Brazil faces smaller cotton exports—V. L. Harness .....             | 5/23      |
| Coffee in first place among farm exports—S. W. Skinner .....        | 11/7      | Cotton Institute approves worldwide campaign .....                  | 6/20      |
| AGRICULTURAL GEOGRAPHY: Western Hemisphere—Sonderson .....          | 5/9       | U.S. policy reflects increase in world surplus.....                 | 6/20      |
| Changing Africa—S. W. Skinner.....                                  | 11/7      | Market in 5 Far Eastern countries—C. Campbell .....                 | 8/1       |
| AGRICULTURAL STATISTICS: A century of .....                         | 7/4       | Foreign market for U.S. cotton—D. L. Pritchard.....                 | 12/12     |
| AKERS, H. A.: Kenya stressing African farming areas .....           | 10/10     | COYNER, M. S.: Agriculture and trade, Mexico .....                  | 10/10     |
| Kenya settlement schemes .....                                      | 12/26     | Agriculture and trade, El Salvador .....                            | 10/24     |
| ALFALFA, DEHY: Promotion of British market—Comben, Campbell....     | 5/2       | Agriculture and trade, Guatemala .....                              | 10/17     |
| ANDERSON, R. N.: New site for Covent Garden market.....             | 10/31     | CRAWFORD, D. M.: Spain's farm imports still rising .....            | 11/14     |
| ANIMAL DISEASES: Foot-and-mouth plagues Europe—R. E. Neetz....      | 2/7       | CUBA: Agricultural situation and food supply—D. Chrisler .....      | 2/28      |
| How U. S. livestock are protected—C. A. Smith .....                 | 9/12      | CZECHOSLOVAKIA: Feedgrains team sees import possibilities .....     | 6/13      |
| ARGENTINA: Government encouraging grain exports—J. P. Rudbeck       | 8/8       | Agriculture and trade—A. P. Danyluk .....                           | 8/1       |
| Agriculture and trade—R. M. Kennedy .....                           | 9/5       | DAIRY: Record butter output, growing EEC surplus—D. L. Schlechty    | 2/7       |
| ASIA: USDA specialist reviews rice situation—R. A. Bieber .....     | 7/4       | Japan increases its imports—D. L. Schlechty .....                   | 6/13      |
| AUSTRALIA: Agriculture's 1966 outlook—partly cloudy—W. L. Rodman    | 1/3       | Finland's dairying keyed to systematic breeding—M. Korpela .....    | 7/4       |
| Limits marketings of domestic tobacco—W. L. Rodman .....            | 1/17      | Export market for nonfat dry milk—D. R. Strobel .....               | 7/18      |
| How it markets its second biggest export—wheat .....                | 2/7       | Surplus problem has changed hemispheres—D. R. Strobel.....          | 11/14     |
| AYERS, A. B.: P. L. 480 rupees support research in India .....      | 12/26     | Foreign market for U.S. dairy products—W. L. Phillipsen.....        | 12/26     |
| BALANCE OF PAYMENTS: . . . and agricultural trade—M. H. Spears      | 1/31      | DANYLUK, A. P.: Agriculture and trade, Poland .....                 | 7/18      |
| BARTER: FY 1966 contracts almost double previous year's .....       | 9/12      | Agriculture and trade, Czechoslovakia .....                         | 8/1       |
| BENNETT, G. A.: Agriculture and trade, Venezuela .....              | 9/12      | DAVIS, H. J.: Chances improve for India's avoiding a 1966 famine    | 7/11      |
| Agriculture and trade, Colombia .....                               | 10/3      | DE FELICE, A. R.: EEC-American debate on agricultural trade .....   | 7/11      |
| BERG, S. O.: Roadblocks to liberalizing agricultural trade .....    | 8/29      | DENMARK: . . . and Spain feel farm trade squeeze—H. W. Henderson    | 5/30      |
| BERNITZ, A.: Traditional foods favored in Germany .....             | 5/9       | Agriculture and trade—M. H. Cohen .....                             | 6/13      |
| BEUKENKAMP, R. L.: Europeans better exporters than Americans? ...   | 5/16      | Cooperatives after the first 100 years—A. M. Rollefson.....         | 10/17     |
| Preview report of Caribbean market study .....                      | 10/3      | DE VERTEUIL, B.: Some Caribbean producers stop growing sugar ...    | 8/29      |
| BIEBER, R. A.: Reviews Asian rice situation .....                   | 7/4       | EAST-WEST TRADE: Potential for expansion—D. G. Johnson .....        | 6/13      |
| "BILLION-DOLLAR" FARM EXPORTS: Sec. Freeman salutes .....           | 10/10     | ECUADOR: Sales opportunities for U.S. farm products—C. Ortega....   | 6/20      |
| BOULWARE, J. H.: India's 4th 5-year plan.....                       | 10/3      | EEC: See Common Market  |           |
| BRAZIL: Farm production reflects economic uptrend—S. O. Ruff ...    | 3/28      | EL SALVADOR: Agriculture and trade—M. S. Coyner .....               | 10/24     |
| Faces prospect of smaller cotton exports—V. L. Harness .....        | 5/23      | EUROPE: How agriculture fared in Eastern Europe during 1965 ...     | 4/18      |
| Agriculture and trade—S. O. Ruff .....                              | 8/29      | U.S. exports of frozen turkeys to W. Europe in van containers.....  | 11/21     |
| BREAKIRON, P. L.: Containerization—off ground, onto ship .....      | 5/2       | EVANS, R. B.: India's Maharashtra State tackles food problem .....  | 10/31     |
| BROWN, J. S.: 11 ways of financing agricultural exports .....       | 9/5       | EXPORT CREDIT: New regulations—R. E. Spencer .....                  | 3/14      |
| BRYAN, H. C.: Pakistan needs food imports .....                     | 12/26     | EXPORT MANAGERS: Lend a hand in U.S. farm trade.....                | 6/27      |
| BUCK, W. F.: Agriculture and trade, Canada .....                    | 10/31     | EXPORTS: Eleven ways of financing—J. S. Brown .....                 | 9/5       |
| BULGARIA: Agriculture and trade—N. Soroka .....                     | 8/15      | At \$6.7 billion, U.S. farm exports set new record—Tontz, Rahe....  | 8/15      |
| CAMPBELL, C.: Market for U. S. cotton in 5 Far East countries ..... | 8/1       | How EEC farm decisions may affect U.S. exports—J. F. Hudson....     | 10/24     |
| CAMPBELL, COLIN: Promotion of British market for dehy .....         | 5/2       | Europeans better exporters than Americans?—R. L. Beukenkamp ...     | 5/16      |
| CANADA: Agriculture in 1966—J. C. McDonald .....                    | 2/7       | FAO: More than \$208 million for World Food Program.....            | 1/31      |
| How Canada markets its wheat .....                                  | 9/12      | Forms new group to study fats and oils problem.....                 | 10/31     |
| Agriculture and trade—W. F. Buck .....                              | 10/31     | FARM POLICY: Geared to revolution in production—J. A. Schnittker    | 9/19      |
| CANNON, R. J.: U.S. wheat paramount.....                            | 3/7       | France moves ahead in farm restructuring—P. E. Quintus.....         | 9/5       |
| CARIBBEAN: Some producers stop growing sugar—de Verteuil.....       | 8/29      | FATS: Oil prices in India at alltime high—J. A. Thadani.....        | 7/4       |
| Preview report of Caribbean market study .....                      | 10/31     | FAO forms new group to study fats and oils problem.....             | 10/31     |
| CARIFTA: To become effective soon—G. P. Rice .....                  | 9/19      | FDA: How U.S. makes sure imported foods are wholesome—F. Clark      | 7/18      |
| CHILE: Agriculture and trade—R. M. Kennedy .....                    | 9/26      | FERREE, P.: Morocco's harvest shows effects of severe drought.....  | 12/19     |
| CHINA, MAINLAND: Agriculture, 1965 and 1966—M. R. Larsen .....      | 8/8       | FERTILIZER: Why world needs more fertilizer—Parker, Nelson.....     | 8/11      |
| May attempt another great leap—J. R. Wenmohs .....                  | 12/26     | India challenged by need for more fertilizers—R. L. Packard.....    | 8/22      |
| CHRISLER, D.: Cuba in 1965 .....                                    | 2/28      | FINLAND: Dairying keyed to systematic breeding—M. Korpela.....      | 7/4       |
| CLARK, F. D.: How U. S. makes sure imported foods are wholesome     | 7/18      | Breadgrains drop, feedgrains break records.....                     | 12/19     |
| CLAYTON, J. E.: Containerization—off ground, onto ship .....        | 5/2       | FITZSIMMONDS, R. S.: Mexico's canned pineapple industry.....        | 9/26      |
| COFFEE: Record outturn in sight for Mexico—J. C. Scholl.....        | 4/11      | FOOD FOR PEACE: Title I shipments near \$900 million last year..... | 7/18      |
| COHEN, M. H.: Sweden potentially good market for U. S. products     | 5/30      | FOWELS, H. A.: 8 years of agricultural research under P.L. 480..... | 8/15      |
| Agriculture and trade, Denmark .....                                | 6/13      | FRANCE: 5th plan draws up blueprint for agriculture.....            | 1/3       |
| Agriculture and trade, Netherlands.....                             | 6/20      | Corn production and effect on U.S. exports.....                     | 1/31      |
| COLOMBIA: Agriculture and trade—G. A. Bennett .....                 | 10/3      | Agriculture and trade.....  | 5/30      |
| COMBEN, N.: Promotion of British market for dehy .....              | 5/2       | Cash grain farmers to start fattening cattle?—H. L. Koeller.....    | 6/27      |
| COMMON MARKET: A year of problems for EEC, GATT, UNCTAD..           | 1/24      | Moves ahead in program of farm restructuring—P. E. Quintus.....     | 9/5       |
| How the EEC helps its African associates .....                      | 3/21      | Agriculture continues strong—H. L. Koeller .....                    | 12/5      |
| U.S. farm exports to EEC show increase—R. E. Friend.....            | 6/27      | FREEBMAN, O. L.: U.S. team sees hope for Vietnam's farmers.....     | 4/11      |
| Council to act soon on common prices—R. E. Shepherd .....           | 6/27      | 1966 world wheat picture—background and perspective.....            | 7/25      |
| EEC-American debate on agricultural trade—A. R. DeFelice.....       | 7/11      | U.S. view of the unfolding world food crisis.....                   | 8/8       |
| Common agricultural policy nearly complete—Hudson, Swain .....      | 8/15      | FRIEND, R. E.: U.S. farm exports to Common Market show increase     | 6/27      |
| New common farm prices—R. E. Friend .....                           | 8/22      | New common EEC farm prices.....                                     | 8/22      |
| Dutch research foresees grain import decline—R. E. Shepherd.....    | 9/19      | FRINK, J. C.: Japan's supermarkets getting bigger and better.....   | 4/18      |
| How new farm decisions may affect U.S. exports—J. F. Hudson....     | 10/24     | FRUIT: Spain boosts citrus exports—D. K. Vining.....                | 3/21      |
| Financial implications of CAP—J. B. Swain .....                     | 10/31     | Mexican strawberry output, exports still soaring—A. C. Cook.....    | 5/23      |
| Revises agricultural projections—B. D. Hedges .....                 | 12/12     | Mexico's canned pineapple industry—R. S. Fitzsimmonds.....          | 9/26      |
| CONGO (Kinshasa): Agriculture and trade—M. L. Teaford .....         | 12/12     |   |           |



|   |       |   |       |
|---|-------|---|-------|
| Exports by air to Europe at '65 level—A. M. McDowell.....           | 5/9   | LAND REFORM: . . . in broader setting—G. Myrdal.....                | 8/15  |
| Our foreign sales of frozen fruits, vegetables—A. C. Cook.....      | 5/23  | LANKFORD, J. F.: Sweden: a new agricultural policy.....             | 10/17 |
| The foreign market for U.S. fruits.....                             | 12/5  | LARSEN, M. R.: Mainland China's agriculture, 1965, 1966.....        | 8/8   |
|   |       | North Vietnam still unable to produce enough food.....              | 10/10 |
| GATT: A year of problems for EEC, GATT, and UNCTAD.....             | 1/24  | LATIN AMERICA: Central American livestock show—D. L. Wilson.....    | 5/23  |
| GERMANY: 1966 Green Report—D. W. Riggs.....                         | 4/4   | LAFTA and integration—V. Jahonnsen.....                             | 11/14 |
| "Golden Toast" campaign helps boost wheat bread sales—              |       | LIVESTOCK: USDA specialist challenges U.S. industry.....            | 1/24  |
| K. L. Murray.....   | 4/4   | Thai livestock improvement—T. Premsoontorn.....                     | 8/29  |
| Agriculture and trade.....  | 5/9   | U.S., and Foreign diseases—C. A. Smith.....                         | 9/12  |
| Traditional foods still favored—A. Bernitz.....                     | 5/9   | LOPES, J.: Spain to import more farm products.....                  | 3/7   |
| Imports of U.S. farm goods again break record—P. G. Minnemon..      | 6/6   | Expansion seen for Portugal's agricultural imports.....             | 6/6   |
| The changing market for U.S. poultry—K. L. Murray.....              | 7/11  | Agriculture and trade, Spain.....                                   | 6/27  |
| GOOLSBY, O. H.: Trade and international financing organizations..   | 8/29  |   |       |
| GRAIN: Japan's bigger takings of U.S. corn, sorghums—J. Minyard..   | 1/3   | McCANN, J. H.: St. Lawrence Seaway and U.S. farm trade.....         | 5/16  |
| The U.S. stand in the Kennedy round—L. R. Hedges.....               | 1/24  | McCONNELL, R. M.: Peru, market for U.S. breeding cattle.....        | 11/21 |
| French corn production and its effect on U.S. exports.....          | 1/31  | McDONALD, J. C.: Canadian agriculture in 1966.....                  | 2/7   |
| Promotion differs in markets for U.S. feedgrains—C. K. Polmby.....  | 2/28  | McDOWELL, A. M.: Fruits and vegetables by air to Europe.....        | 5/9   |
| Acres diversions, exports have cut U.S. surpluses.....              | 4/25  | McNEELY, J. G.: Guidelines to market development.....               | 2/14  |
| Unit trains speed Midwest's exports—R. K. Severin.....              | 5/16  | MARKET DEVELOPMENT: Guidelines vital—J. G. McNeely.....             | 2/14  |
| U.S. feedgrains team sees possibilities of Czech imports.....       | 6/13  | MARX, R. E.: Coffee, cotton, cocoa—"the big 3" in Africa.....       | 11/7  |
| Argentine encouraging exports—J. P. Rudbeck.....                    | 8/8   | MEAT: How the U.S. meat import low functions.....                   | 12/12 |
| Dutch foresee decline in EEC imports—R. E. Shepherd.....            | 9/19  | MEXICO: Record coffee output in sight—J. C. Scholl.....             | 4/11  |
| The foreign market for U.S. feedgrains.....                         | 11/28 | Strowberry output, exports soaring—A. C. Cook.....                  | 5/23  |
| GREECE: Agriculture and trade—S. Tsou.....                          | 7/4   | Mexico's canned pineapple industry—R. S. FitzSimmonds.....          | 9/26  |
| Bobby calves airshipped from U.S.....                               | 11/21 | Agriculture and trade—M. S. Coyner.....                             | 10/10 |
| GUATEMALA: Agriculture and trade—M. S. Coyner.....                  | 10/17 | MIDWEST: Unit trains speed grain exports—R. K. Severin.....         | 5/16  |
| GUM ARABIC: From Sudan, exported all over the world—J. B. Parker    | 6/20  | MINNEMAN, P. G.: German imports of U.S. farm goods.....             | 6/6   |
|   |       | MINYARD, J. D.: Japan's takings of U.S. corn, sorghums.....         | 1/3   |
|   |       | Japan's imports of U.S. products \$966 million.....                 | 3/21  |
| HARNESS, V. L.: Brazil faces smaller cotton exports.....            | 5/23  | U.S. selling a wider variety of food products in Japan.....         | 9/5   |
| HEDGES, B. D.: EEC revises its agricultural projections.....        | 12/12 | MOE, L. E.: African oilseeds as exchange earners.....               | 11/7  |
| HEDGES, I. R.: U.S. stand on grain in Kennedy round.....            | 1/24  | MONCURE, R. C.: Botswana and Lesotho among Africa's free nations    | 11/7  |
| HENDERSON, H. W.: Spain and Denmark feel farm trade squeeze.....    | 5/30  | MOROCCO: Harvest shows effects of severe drought.....               | 12/19 |
| Commissaries for armed forces.....                                  | 12/19 | MURRAY, K. L.: "Golden Toast" campaign in West Germany.....         | 4/4   |
| HIGHSMITH, R. M.: How types of farming divide world agriculture     | 5/14  | A look at the changing market for U.S. poultry in Germany.....      | 7/11  |
| HONG KONG: Future bright for U.S. agricultural trade.....           | 6/13  | MYRDAL, G.: Land reform in broader economic and social setting....  | 8/15  |
| HUDSON, J. F.: EEC's common agricultural policy nearly complete.... | 8/15  |   |       |
| How new EEC farm decisions may affect U.S. exports.....             | 10/24 | NEETZ, R. E.: Foot-and-mouth disease plagues Europe.....            | 2/7   |
| HUNGARY: Agriculture and trade—R. E. Neetz.....                     | 7/25  | Yugoslavia's economic reform measures.....                          | 4/25  |
| HURT, L. C.: World sugar surplus continues but prices may improve   | 2/14  | Agriculture and trade, Hungary.....                                 | 8/22  |
| HUTCHINS, M. P.: UAR trying to irrigate its western desert.....     | 9/26  | NELSON, L. B.: Why the world needs more fertilizer.....             | 8/1   |
|   |       | NETHERLANDS: Agriculture and trade—M. H. Cohen.....                 | 6/20  |
| ICELAND: Forming of rim of Arctic Circle—L. R. Williams.....        | 11/28 | NUTS: Britain's sales potential for American nuts.....              | 6/27  |
| INDIA: Raises crop-production goals—S. W. Phillips.....             | 1/3   | Africa's cashew industry hinges on mechanization—R. C. Torrens....  | 11/7  |
| Water supply, a vital but limited resource—R. L. Packard.....       | 5/23  |   |       |
| Food dilemma stems from too many people—R. L. Packard.....          | 5/30  | OECD: The unfolding world food crisis—O. L. Freeman.....            | 8/8   |
| Vegetable oil prices reach all-time high—J. A. Thodani.....         | 7/4   | OLSON, E. B.: A case study in selling turkeys overseas.....         | 7/25  |
| Chances improve for avoiding a 1966 famine—H. J. Davis.....         | 7/11  |   |       |
| Challenged by need for more fertilizers—R. L. Packard.....          | 8/22  | PACKARD, R. L.: India's water supply.....                           | 5/23  |
| 4th 5-year plan focuses on agriculture—J. H. Baulware.....          | 10/3  | India's food dilemma stems from too many people.....                | 5/30  |
| Maharashtra State tackles its food problem—R. B. Evans.....         | 10/31 | India challenged by urgent need for more fertilizers.....           | 8/22  |
| How it distributes its immense wheat imports—S. W. Phillips.....    | 12/12 | PAKISTAN: Needs food imports—H. C. Bryon.....                       | 12/26 |
| P.L. 480 rupees support research—A. B. Ayers.....                   | 12/26 | PALMBY, C. K.: Feedgrains promotion in old, new U.S. markets.....   | 2/28  |
| IOANES, R. A.: Cooperatives have opportunities in export market..   | 2/14  | PARKER, F. W.: Why the world needs more fertilizer.....             | 8/1   |
| ISRAEL: Agriculture and trade—H. H. Tegeler.....                    | 11/21 | PARKER, J. B.: Gum arabic from Sudan exported to world markets..    | 6/20  |
| ITALY: Agriculture and trade.....                                   | 6/6   | PERU: Agriculture and trade—S. O. Ruff.....                         | 9/19  |
| Adjustment problems continue to handicap agriculture—R. C. Tetra    | 11/28 | Market for U.S. breeding cattle—R. M. McConnell.....                | 11/21 |
| IVORY COAST: Agriculture and trade—S. W. Skinner.....               | 12/5  | PHILIPPINES: U.S. is top food supplier—W. A. Stern.....             | 1/17  |
|   |       | World rice research centers of institute.....                       | 1/24  |
| JACOBSON, D. H.: Future of farm trade with developing countries     | 7/25  | Good food promotion aimed at greater sales.....                     | 12/19 |
| JAPAN: Bigger takings of U.S. corn, sorghums—J. D. Minyard.....     | 1/3   | PHILLIPS, S. W.: India raises crop-production goals.....            | 1/3   |
| Businessman promotes wheat foods—C. Jeon.....                       | 1/3   | How India distributes wheat imports.....                            | 12/12 |
| Imports of U.S. products \$966 million—J. D. Minyard.....           | 3/21  | PHILLIPSEN, W. L.: Foreign market for U.S. dairy products.....      | 12/26 |
| Supermarkets bigger and better—J. C. Frink.....                     | 4/21  | P.L. 480: Agricultural research under P.L. 480—H. A. Fowells.....   | 8/15  |
| Increases its imports of dairy products—D. L. Schlechty.....        | 6/13  | Important new direction given U.S. food assistance.....             | 12/5  |
| Conference appraises future of U.S.-Japanese farm trade.....        | 7/11  | Rupees support research in India—A. B. Ayers.....                   | 12/26 |
| U.S. selling wider variety of food products—J. D. Minyard.....      | 9/5   | POLAND: Agriculture and trade—A. P. Danyluk.....                    | 7/18  |
| U.S. producers promote consumer use of soybean oil.....             | 9/19  | PORTUGAL: Expansion seen for agricultural imports—J. Lopes.....     | 6/6   |
| JEAN, C.: Japanese businessman promotes wheat foods.....            | 1/3   | POULTRY: Turkey sales best of U.S. poultry exports.....             | 2/21  |
| JOHANNSEN, V.: LAFTA and Latin American integration.....            | 11/14 | The market for U.S. poultry in Germany—K. L. Murray.....            | 7/11  |
| JOHNSON, D. G.: Potential for East-West farm trade.....             | 6/13  | A case study in selling turkeys overseas—E. B. Olson.....           | 7/25  |
| JOHNSON, I. E.: World tollow market and U.S. exporters.....         | 12/5  | U.S. well represented at World's Poultry Congress.....              | 10/3  |
|   |       | Imports can help build foreign poultry industries—C. C. Warren..... | 10/3  |
| KEATON, C. R.: Yugoslav farm policy—gradual collectivization.....   | 10/3  | U.S. exports of frozen turkeys in van containers.....               | 11/21 |
| Sharp gains seen for Yugoslav farm output this year.....            | 12/12 | Foreign market for U.S. poultry products.....                       | 12/19 |
| KENNEDY, R. M.: Agriculture and trade, Argentine.....               | 9/5   | Turkey among festive foods in Germany.....                          | 12/19 |
| Agriculture and trade, Chile.....                                   | 9/26  | PREMSONTORN, T.: Thai livestock improvement program.....            | 8/29  |
| KENYA: Stressing its African farming areas—H. A. Akers.....         | 10/10 | PRITCHARD, D. L.: The foreign market for U.S. cotton.....           | 12/12 |
| Settlement schemes—H. A. Akers.....                                 | 12/26 |   |       |
| KIGER, H. C.: Rhodesia plans big tobacco crop.....                  | 8/22  | QUINTUS, P. E.: France and its program of farm restructuring.....   | 9/5   |
| Improvement program pays off for U.S. tobacco exports.....          | 10/17 |   |       |
| KOELLER, H. L.: French cash grain farmers to fatten cattle?.....    | 6/27  | RAHE, D. H.: \$6.7 billion of U.S. farm exports.....                | 8/15  |
| French agriculture continues strong.....                            | 12/5  | RHODESIA: Big tobacco crop despite problems—H. C. Kiger.....        | 8/22  |
| KORPELA, M.: Finland's dairy farming: systematic breeding.....      | 7/4   | RICE: A graphic picture of U.S. rice in world trade.....            | 1/31  |
| LAFTA: . . . and Latin American integration—V. Jahonnsen.....       | 11/14 |   |       |



OFFICIAL BUSINESS

To change your address or stop mailing,  
tear off this sheet and send to Foreign  
Agricultural Service, U.S. Dept. of Agriculture,  
Rm. 5918, Washington, D.C. 20250.

RICE—Continued

Month/day

Month/day

|   |       |
|---|-------|
| International Rice Year.....  | 1/31  |
| World rice research centers at institute in Philippines.....          | 1/24  |
| USDA specialist reviews Asian situation—R. A. Bieber.....             | 7/4   |
| Mainstay and hope for 1.1 billion people.....                         | 10/24 |
| RICE, G. P.: CARIFTA to become effective soon.....                    | 9/19  |
| RIGGS, D. W.: Progress and problems on West German farms.....         | 4/4   |
| RODMAN, W. L.: Australian agriculture's 1966 outlook.....             | 1/3   |
| Australia limits marketings of tobacco.....                           | 1/17  |
| ROLLEFSON, A. M.: Denmark's cooperatives.....                         | 10/17 |
| ROMANIA: Agriculture and trade—C. A. Zozave.....                      | 8/8   |
| RUDBECK, J. P.: Argentina encouraging grain exports.....              | 8/8   |
| Record world wheat crop will relieve short supplies.....              | 9/26  |
| RUFF, S. O.: Brazil's 1965 farm production.....                       | 3/28  |
| Agriculture and trade, Brazil.....                                    | 8/29  |
| Agriculture and trade, Peru.....                                      | 9/19  |
| ST. LAWRENCE SEAWAY: Meaning to U.S. farm trade—J. McConn.....        | 5/16  |
| SANDERSON, A.: Agricultural geography: Western Hemisphere.....        | 5/9   |
| SANTMYER, C.: Tunisia developing Medjerda River Valley.....           | 7/11  |
| Northern Africa seeks key to economic growth.....                     | 11/7  |
| SCHERTZ, L. P.: U.S. wheat paramount.....                             | 3/7   |
| SCHILLING, G.A.W.: New markets boost cotton sales to Africa.....      | 5/2   |
| SCHLECHTY, D. L.: Record butter output, growing EEC surplus.....      | 2/7   |
| Japan increases imports of dairy products.....                        | 6/13  |
| SCHNITTKER, J. A.: Farm policy geared to production revolution.....   | 9/19  |
| SCHOLL, J. C.: Record coffee output in sight for Mexico.....          | 4/11  |
| SEVERIN, R. K.: Unit trains speed Midwest's grain exports.....        | 5/16  |
| SHEPHERD, R. E.: EEC Council to act soon on common prices.....        | 6/27  |
| Dutch foresee decline in EEC grain imports.....                       | 9/19  |
| SINGLETON, C. B.: East Africa's Great Rift Valley.....                | 11/7  |
| SKINNER, S. W.: Changing Africa: New agricultural geography.....      | 11/7  |
| Coffee now in first place among African farm exports.....             | 11/8  |
| Agriculture and trade, Ivory Coast.....                               | 12/5  |
| SMITH, C. A.: Protecting U.S. livestock from foreign diseases.....    | 9/12  |
| SOROKA, N.: Agriculture and trade, Bulgaria.....                      | 8/15  |
| SOUTH AFRICA: To buy record amounts of U.S. wheat in 1966.....        | 6/6   |
| SOVIET UNION: Same results of 1965 farm output—H. E. Walters.....     | 2/21  |
| New plan implies major farm policy switch—H. E. Walters.....          | 3/21  |
| Agriculture and trade—H. E. Walters.....                              | 7/11  |
| 1966 a bonner year for Soviet agriculture.....                        | 12/19 |
| SOYBEANS: U.S. producers, Japanese crushers promote oil use.....      | 9/19  |
| SPAIN: To import more agricultural products—J. Lopes.....             | 3/7   |
| Boosts its citrus exports—D. K. Vining.....                           | 3/21  |
| ... and Denmark feel farm trade squeeze—H. W. Henderson.....          | 5/30  |
| Agriculture and trade—J. Lopes.....                                   | 6/27  |
| Farm output improves, imports still rising—D. M. Crawford.....        | 11/14 |
| SPEARS, M. H.: U.S. payments balance and agricultural trade.....      | 1/31  |
| SPENCER, R. E.: New credit regulations.....                           | 3/14  |
| STERN, W. A.: U.S. top supplier of Philippine food industry.....      | 1/17  |
| STROBEL, D. R.: Export market for nonfat dry milk.....                | 7/18  |
| Dairy surplus problem has changed hemispheres.....                    | 11/14 |
| SUDAN: Gum arabic exported all over the world—J. B. Parker.....       | 6/20  |
| SUGAR: World surplus continues but prices may improve—L. C. Hurt..... | 2/14  |
| Some Caribbean producers stop growing it—B. de Verteuil.....          | 8/29  |
| SWAIN, J. B.: EEC's common agricultural policy nearly complete.....   | 8/15  |
| Financial implications of EEC's CAP.....                              | 10/31 |
| SWEDEN: Potentially good market for U.S.—M. H. Cahen.....             | 5/30  |
| Considering a new agricultural policy—J. F. Lonkford.....             | 10/17 |
| TAIWAN: A look at Taiwan's agriculture.....                           | 4/4   |
| TALLOW: Changing market challenges U.S.—I. E. Johnson.....            | 12/5  |
| TEAFORD, M. L.: Agriculture and trade, Congo (Kinshasa).....          | 12/12 |

|   |       |
|---|-------|
| TEGELER, H. H.: Agriculture and trade, Israel.....                    | 11/21 |
| Agriculture and trade, Turkey.....                                    | 11/28 |
| TETRO, R. C.: Adjustment problems in Italian agriculture.....         | 11/28 |
| THADANI, J. A.: Vegetable oil prices in India reach record.....       | 7/4   |
| THAILAND: Potential for greater wheat use.....                        | 8/22  |
| Steps up livestock improvement—T. Premsoontarn.....                   | 8/29  |
| TOBACCO: Rhodesia plans big tobacco crop—H. C. Kiger.....             | 8/22  |
| U.S. quality improvement pays off—H. C. Kiger.....                    | 10/17 |
| The foreign market for U.S. tobacco.....                              | 11/14 |
| TONTZ, R. L.: At \$6.7 billion U.S. farm exports set record.....      | 8/15  |
| TORRENS, R. C.: Africa's cashew industry: mechanization.....          | 11/7  |
| TRADE CENTER, LONDON: To exhibit U.S. foods.....                      | 8/8   |
| Hub of U.S. promotion in Britain—E. B. Winner.....                    | 8/22  |
| TRADE FAIRS: 1966 aimed at foreign tradespeople.....                  | 1/10  |
| Fair promotions slated in 15 countries, 1967.....                     | 12/26 |
| TSU, S.: Agriculture and trade, Greece.....                           | 7/4   |
| TUNISIA: Developing the Medjerda River Valley—C. Sontmyer.....        | 7/11  |
| TURKEY: Agriculture and trade—H. H. Tegeler.....                      | 11/28 |
| UNCTAD: Year of problems for EEC, GATT, and UNCTAD.....               | 1/24  |
| UAR: Second plan stresses agriculture—C. J. Warren.....               | 5/2   |
| Irrigating the western desert—M. P. Hutchins.....                     | 9/26  |
| U.K.: Has sales potential for U.S. peanuts, pecans.....               | 6/27  |
| New site for Covent Garden market—R. N. Andersen.....                 | 10/31 |
| Agriculture and trade.....  | 5/23  |
| VENEZUELA: Agriculture and trade—G. A. Bennett.....                   | 9/12  |
| VIETNAM: Hope for Vietnam's farmers—O. L. Freeman.....                | 4/11  |
| North Vietnam unable to produce enough food—M. R. Larsen.....         | 10/10 |
| VINING, D. K.: Spain boosts its citrus exports.....                   | 3/21  |
| WALTERS, H. E.: Some results of 1965 Soviet farm output.....          | 2/21  |
| New Soviet plan implies major farm policy switch.....                 | 3/21  |
| Agriculture and trade, Soviet Union.....                              | 7/11  |
| WARE, T. M.: World food problem.....                                  | 9/12  |
| WARREN, C. C.: Imports can help build foreign poultry industries..... | 10/3  |
| WARREN, C. J.: UAR's second 5-year plan.....                          | 5/2   |
| WENMOHS, J. R.: Mainland China may attempt another great leap.....    | 12/26 |
| WESTERN HEMISPHERE: Agricultural geography—A. Sanderson.....          | 5/9   |
| WHEAT: Japanese businessmen promotes wheat foods—C. Jeon.....         | 1/3   |
| Haw Australio markets.....  | 2/7   |
| U.S. and world supply situation—L. P. Schertz, R. J. Cannan.....      | 3/7   |
| "Golden Toast" campaign in West Germany—K. I. Murrey.....             | 4/4   |
| South Africa to buy record amounts of U.S. wheat.....                 | 6/6   |
| Free World's exports to Communist nations.....                        | 7/18  |
| The 1966 world picture—O. L. Freeman.....                             | 7/25  |
| Potential for greater use evident in Thailand.....                    | 8/22  |
| Haw Canada markets.....   | 9/12  |
| Record world crop—L. T. Willahan, J. P. Rudbeck.....                  | 9/26  |
| How India distributes its imports—S. W. Phillips.....                 | 12/12 |
| WILLAHAN, T.: Record world wheat crop to relieve shortage.....        | 9/26  |
| WILLIAMS, L. R.: Iceland: forming of the Arctic Circle.....           | 11/28 |
| WILSON, D. L.: Central American livestock exposition.....             | 5/23  |
| WINNER, E. B.: U.S. trade center in Britain.....                      | 8/22  |
| WORLD FOOD PROGRAM: More than \$20B million pledged.....              | 1/31  |
| WORLD TRADE: Roadblocks to liberalizing world's trade—S. O. Berg..... | 8/29  |
| YUGOSLAVIA: Economic reform measures—R. E. Neetz.....                 | 4/25  |
| Agriculture and trade—R. E. Neetz.....                                | 8/22  |
| Farm policy: gradual collectivization—C. R. Keatan.....               | 10/3  |
| Sharp gains for farm output—C. R. Keatan.....                         | 12/12 |
| ZAZOVE, C. A.: Agriculture and trade, Rumania.....                    | 8/8   |















NATIONAL AGRICULTURAL LIBRARY



1022906229